

XXXI.—*Descriptions of new Mammals from South America.*
By OLDFIELD THOMAS.

Sciurus pyrrhinus, sp. n.

Size of *S. variabilis*. General colour rich grizzled rufous all over above, and in some specimens below; the whole of the upper surface uniformly of this tint, not darker on the posterior back, as is usually the case. The rufous is heavily grizzled with black on the back, but becomes clearer on the sides and limbs, which are of a vivid rufous throughout. Under surface either rufous, vivid and sharply defined, without black intermixture, or white, or a patchy mixture of the two. Backs of ears short-haired, dark rufous, a spot of lighter rufous behind their posterior bases. Tail rather shorter than head and body, grizzled black and yellowish at base, broadly washed with vivid rufous for its terminal half, the long hairs of this part black at base and with two other black rings further up, the ends bright rufous.

Skull and teeth about as in *S. variabilis*.

Dimensions of the type (an adult female in skin):—

Head and body 240 millim.; tail 208; hind foot (wet) 59; ear (wet) 21.

Skull: greatest length 52; basilar length 46; greatest breadth 33·5; nasals $16\cdot5 \times 8\cdot4$; interorbital breadth 18; intertemporal breadth 19; diastema 15·2; palate length from henselion 26·7; length of upper tooth-series 9·6.

Hab. Garita del Sol, Vitoc, Peru. Coll. J. Kalinowski, Oct. 1, 1891.

Type B.M. no. 97. 10. 3. 12. Received in exchange from the Branicki Museum, Warsaw.

Two other specimens were obtained at Chanchamayo by Mr. Kalinowski.

This handsome squirrel is clearly that referred to by Tschudi* as *Sciurus variabilis*, and is equally clearly not the true Colombian *S. variabilis*, Is. Geoff., which, among other differences, may be readily distinguished by its posterior back being much darker and less rufous than its fore back and shoulders. *S. tricolor*, Pöppig, of Tschudi, is also a darker coloured animal, and, by the dimensions given, is evidently of decidedly greater size.

* 'Fauna Peruana,' p. 155, pl. x. (1845). Also by myself, P. Z. S. 1893, p. 337.

Sciurus (Microsciurus) mimulus, sp. n.

Of the small size and with the cranial and dental characters of the other species of *Microsciurus*, but with almost precisely the coloration and general appearance of *Sciurus medellinensis*, Gray (probably a synonym of *S. Pucherani*, Fitz.). General colour deep brown, profusely grizzled with yellowish fulvous and with a marked black dorsal stripe. Crown and nape indistinctly blackish. Ears finely edged with fulvous; no whitish postauricular patch. Shoulders grizzled fulvous, with a tinge of rufous. Dorsal line shining black and strongly marked on the middle of the back, fading away anteriorly and posteriorly. Throat and chest rich fulvous, passing on the belly into blackish grizzled olivaceous grey. Limbs like back, the tips of the digits fulvous; inner sides of hips also more fulvous than the belly. Tail-hairs ringed with fulvous and black, their tips dull yellowish.

Skull narrower and more elongate than in *S. chrysurus*, the muzzle especially slender and lengthened. Interparietal very broad transversely.

Dimensions of the type (an adult female, measured in the flesh by the collector):—

Head and body 130 millim.; tail 109; hind foot, without claws, 33; ear 16.

Skull: greatest length 38; basilar length 29; greatest breadth 23; nasals 10.6×5 ; interorbital breadth 13.5 ; interparietal 4×9 ; palate length from henselion 15.8 ; diastema (to *p.*⁴) 9.5 ; length of upper tooth-row (excluding *p.*³) 5.6 .

Hab. Cachavi, N. Ecuador, alt. 167 m. Coll. W. H. F. Rosenberg, Jan. 23, 1897.

Type B.M. no. 97. 11. 7. 39. Three specimens examined.

This little squirrel differs markedly from the other *Microsciuri*—*S. (M.) chrysurus*, *alfari*, and *peruanus*—by its black dorsal line, the yellow grizzled-brown of its body-colour, and its rich fulvous chest, but has a very striking resemblance to the larger Colombian species of true *Sciurus* to which Gray applied the name *S. medellinensis*. The latter, however, is in all probability the same as *S. Pucherani*, Fitz. (*S. rufoniger*, Puch., nec Gray), of Bogotá, the type of which, as M. de Pousargues has been so kind as to inform me, appears to have only one upper premolar, while its hind foot is 39 millim. long without the claws. Its position has been hitherto very doubtful, so that M. de Pousargues's information about it is exceedingly welcome.

In any case, however, whether *S. medellinensis* is or is not a synonym of *S. Pucherani*, *S. (M.) mimulus* has nothing

to do with either, in spite of its extreme resemblance to them externally.

Among some Muridæ recently presented by Mr. L. Söderström from Ecuador there are three specimens of a mouse corresponding so closely with Tomes's description of his "*Hesperomys minutus*" that there can be no reasonable doubt that they really represent that animal. On comparing them with the skin from Pallatanga provisionally referred by me to *minutus* in 1894*, the latter proves to be quite a distinct species, which does not seem to have been described, and may therefore be called

Oryzomys dryas, sp. n.

A small *Oryzomys* of a deep rufous colour, but little lighter below. Zygoma-root without anteriorly projecting plate.

Size about as in *O. longicaudatus*, rather larger than *O. minutus*. Fur thick, close, and woolly, about 7-8 millim. in length on the back. General colour above rich fulvous rufous, lined with black on the back; sides clearer fulvous, and this colour extends without line of demarcation all over the under surface, where the hairs are slaty basally and fulvous terminally. Ears of medium length, thinly clothed with black hairs. Upper surface of hands and feet dull whitish. Fifth hind toe reaching to the base of the second phalanx of the fourth. Tail longer than head and body, very finely scaled, thinly haired, brown above, rather paler below.

Skull delicate, little ridged. Interorbital space narrow, square-edged, but not ridged. Brain-case smooth, temporal ridges scarcely perceptible. Interparietal broad transversely, narrow antero-posteriorly. Zygomatic root very narrow, without anterior projecting plate, the anterior edge vertical and in the same line with the front edge of the bridge above. Anterior palatine foramina rather large, parallel-sided, their posterior extremity barely reaching to the front edge of *m*.¹. Teeth small and delicate, apparently of the usual pattern, but very much worn down in the type.

Dimensions of the type (an old specimen of doubtful sex), in skin:—

Head and body 87 millim.; tail (doubtfully perfect at tip) 109; hind foot, without claws (moistened) 23; ear (shrunk) 12.

Skull: greatest length 24.5; basilar length 18; greatest breadth 12.4; nasals 8.7 × 2.6; interorbital breadth 3.2;

* Ann. & Mag. Nat. Hist. (6) xiv. p. 357.

breadth of brain-case 10·8; interparietal $2\cdot8 \times 8\cdot8$; anterior zygoma-root 1·6; palate length from henselion 9·8; diastema 6·5; palatal foramina $4\cdot5 \times 2$; length of upper molar series 3·1.

Hab. Pallatanga, Ecuador.

Type B.M. no. 59. 11. 1. 11. Collected by L. Fraser, December 1858.

“Found among the bananas and plantains” (*L. F.*).

The doubt as to its being *O. minutus* being once settled in the negative, there is no described species from which this animal may not be readily distinguished by its thick fur, rufous under surface, and narrow anterior zygoma-root.

A second form of the same group occurs at Bogotá, and may be provisionally regarded as a subspecies of *O. dryas*.

Oryzomys dryas humilior, subsp. n.

Closely allied to the typical subspecies in all important respects, but smaller (as shown by the skull and hind-foot measurements) and less rufous in colour, the general tone being a dull brownish yellow, this colour being, just as in *O. d. typicus*, continued all over the belly, without any line of demarcation on the sides. Fur shorter and more woolly in texture. The ears are blacker, more in contrast with the general colour. The skull is similar to that of *O. d. typicus*, but the supraorbital edges are less sharply square, there is slightly more of an anterior projection of the zygoma-root, and the palatine foramina are shorter.

Dimensions of the type (an adult male in skin):—

Head and body (stretched) 90 millim.; tail 122; hind foot (moistened) 20; ear 14.

Skull: greatest length 26; basilar length 16·7; greatest breadth 12·1; nasals $8\cdot5 \times 2\cdot6$; interorbital breadth 3·2; breadth of brain-case 10·5; interparietal $3\cdot3 \times 8\cdot5$; anterior zygoma-root 1·8; palate-length 9·2; diastema 6·1; palatal foramina $4 \times 1\cdot7$; length of upper molar series 3.

Hab. Plains of Bogotá. Coll. G. D. Child, May 10, 1895.

Type B.M. no. 98. 7. 3. 3.

Oryzomys flavicans subluteus, subsp. n.

Similar to the typical subspecies* in size and general characters, but distinguished by its darker belly. In *O. f. typicus*, as exemplified in more than a dozen specimens from the type locality, the under surface is whitish with a

* Described in Ann. & Mag. Nat. Hist. (6) xiv. p. 351 (1894).

faint buffy tinge, the hairs on the throat and chest being entirely of this colour, while those of the belly are slaty just at their bases. In the present form, of which three quite similar adult examples are available, the hairs of the chest and belly are slaty for their basal halves, while their terminal halves are deep yellowish buffy, little lighter than the yellow of the back and sides. The throat is, however, still white, as in the typical form. Ears, limbs, and tail apparently as in *typicus*.

Dimensions of the type (measured in skin) :—

Head and body 120 millim.; tail 127; hind foot (wet) 26.

Skull: greatest length 30·3; greatest breadth (c.) 16; palatal foramina $5 \times 2\cdot2$; length of upper molar series 4·8.

Hab. W. Cundinamarca. Coll. G. D. Child.

Type B.M. no. 98. 7. 3. 2.

The number of specimens examined seems to indicate that this animal, slight as its differences are from the true *O. flavicans* of Merida, is yet locally constant, and therefore should have a distinguishing name. It is also evidently different from the brilliantly yellow-bellied form inhabiting the Sierra de Santa Marta, a specimen of which I have seen by the kindness of Mr. Outram Bangs.

Zygodontomys brunneus, sp. n.

Closely allied and very similar in all respects to *Z. brevicauda*, Allen, from Trinidad, but rather larger, with longer, softer fur (hairs of back 12–14 millim. in length), and the general colour markedly different owing to the absence of the rufous tinge so evident, especially posteriorly, in that species. The colour is therefore a very uniform finely grizzled brown, not more rufous posteriorly than anteriorly. Belly dirty greyish, the tips of many of the hairs buffy. Ears short, their hairs black. Upper surface of hands and feet dull white. Tail about as long as the body without the head, finely haired, blackish above, whiter below, though less distinctly bicolor than in *Z. brevicauda*.

Skull with the nasals broad and square posteriorly and the palatal foramina markedly broadened mesially, especially in old age.

Dimensions of the type (an adult female, in skin) :—

Head and body 152 millim.; tail (c.) 117; hind foot (wet) 25; ear (wet) 19.

Skull (of another specimen): greatest length 34; basilar length 28; greatest breadth 17·7; interorbital breadth 5; palate length to henselion 15; diastema 9·5; palatal foramina $7\cdot2 \times 3$; length of upper molar series 5.

Hab. El Saibal, W. Cundinamarca. Coll. G. D. Child, Dec. 22, 1895.

Type B.M. no. 98. 7. 3. 4.

This species is evidently the mainland representative of the insular *Z. brevicauda*, but is so different in colour as to require specific separation.

I use provisionally Dr. Allen's generic term *Zygodontomys*, as these short-tailed rats allied to *Oryzomys* seem to form a natural group, and there is a convenience in their having a special name. At the same time the dental character which he states to be peculiar to them, and on which he bases the name (the presence of a longitudinal ridge connecting the pairs of cusps), appears to occur in all *Oryzomys*, including the typical species *O. palustris*, Harl. But *Zygodontomys* (as represented by *Z. brevicauda* and *Z. brunneus*) has a distinguishing character in the *absence* of the transverse ridge running outwards from the longitudinal yoke between the pairs of cusps, and the consequent unusual simplicity of the molars*. The absence of this transverse crest, which somewhat fills up the valley between the laminae, tends to make the longitudinal yoke much more prominent in *Zygodontomys*, and therefore no doubt accounts for the stress which Dr. Allen lays on the latter crest.

The species described by myself as *Oryzomys microtinus*† from Surinam will also fall into *Zygodontomys*.

Phyllotis Haggardi, sp. n.

Very similar to *Ph. Darwini* in colour and other essential respects, but much smaller, and with the ears only about half as large.

Fur about 11 millim. long on the back. General colour soft fawny grey, liberally mixed with blackish on the back. Sides clearer fawn, especially where edging the white of the belly. Under surface white, not sharply defined, the grey bases of the hairs showing through. Ears large, but not of abnormal proportions, both their surfaces well haired, blackish, finely mixed with yellow; a few bright orange hairs round their anterior base. Eyes without marked orbital rings. Upper surfaces of hands and feet silvery white. Tail little longer than the body without the head, well haired, its upper surface brown or black, its sides and under surface white.

* Reference to the absence of the transverse ridge in certain *Crice-tinæ* has been made by Winge ('Gnavere fra Lagoa Santa,' p. 11) and Major (P. Z. S. 1897, p. 716).

† Ann. & Mag. Nat. Hist. (6) xiv. p. 358 (1894).

Skull essentially similar to that of *Ph. Darwini*, but differing by its much smaller size.

Dimensions of the type (in skin):—

Head and body 97 millim.; tail 86; hind foot (wet) 23; ear (wet) 18.

Skull: back of frontals to tip of nasals 18; greatest breadth 13·5; nasals $11\cdot3 \times 3\cdot5$; interorbital breadth 4·6; palatal length from henselion 12·2; diastema 7; upper molar series 4·4; extreme length of lower jaw 16·5.

Hab. Mount Pichincha, Ecuador, altitude 3400–4000 metres.

Type B.M. no. 98. 5. 1. 11. Collected October 1897, and presented to the British Museum by Consul L. Söderström.

This species, for whose discovery we have again to thank Mr. L. Söderström, of Quito, is evidently the Ecuadorean representative of the Chilean *Ph. Darwini*, but may be readily distinguished by its smaller size and much smaller ears. At the request of Mr. Söderström I have named it in honour of Mr. W. H. D. Haggard, Her Majesty's Minister at Caracas, to whose kindness he has been at various times indebted.

Akodon languarum, sp. n.

Closely allied to *A. obscurus*, Waterh., but lighter in general colour, less heavily lined on the back, and without the dark yellowish suffusion of the upper and under surfaces. As a consequence the colour is a comparatively clear grey above, though more yellowish on the rump, and lighter on the sides, while the belly is whitish, the tips of the hairs being white, with scarcely a tinge of yellowish. Hands and feet uniformly pale grey above. Tail blackish above, whiter below.

Size and proportions about as in *A. obscurus*.

Skull, as compared to a number of skulls (both older and younger) of *A. obscurus*, rather more heavily ridged in the supraorbital region, the interparietal rather smaller, the top of the anteorbital projection more slanted downwards, and both the palatal foramina and posterior nares narrower.

Dimensions of the type (measured in the flesh by Mr. Kerr):—

Head and body 115 millim.; tail 76; hind foot 21; ear 14.

Skull: greatest length 28·5; basilar length 24·3; greatest breadth 16; nasals $9\cdot7 \times 3\cdot3$; interorbital breadth 4·9; interparietal $2 \times 8\cdot8$; palate length from henselion 12·8; diastema 8·4; palatal foramina $6\cdot2 \times 2$; length of upper molar series (c.) 4·7.

Hab. Waikthlatingmayalwa, Northern Chaco of Paraguay, May 10, 1897.

Type B.M. no. 98. 5. 14. 4. Collected and presented by Mr. J. Graham Kerr.

Lengua native name "Põmõõ."

Another specimen of this species, collected on the 31st of May, 1897, at Puerto 14 de Mayo, in the Department of Bahia Negra, Northern Chaco, by Dr. Boggiani, has been submitted to me for determination by Dr. Gestro, of the Genoa Museum.

For comparison with *A. lenguarum* I have had a small series of modern skins of *A. obscurus*, collected by myself in May 1896 at Colon, near Montevideo, where I found it very common, living in company with *A. arenicola* in the long grass.

Dasyprocta aguti and the Species allied to it.

All the red- and yellow-rumped Agutis have hitherto been lumped together under the above name, apparently without much examination, for the most superficial comparison shows that those at least of Guiana and Brazil are different from each other, not to mention that other forms may prove to exist.

But the fixing of Linnæus's "*Mus aguti*" on to one or other of these animals has proved a matter of much difficulty. In his original description* he refers to Brisson, Ray, Marcgrave, Pison, and Johnston. Tracing these notices back, they prove all to depend on the account of an animal given at about the same time by Marcgrave and Pison, but actually published first by the former†. In these accounts the animal is distinctly stated to be Brazilian, and in Marcgrave's geographical work‡ Brazil is strictly limited to a country corresponding very nearly to modern Brazil, and does not therefore include Guiana. In spite, therefore, of Linnæus's mention of "Surinam, Guiana," after Brazil, I would propose to assign "*Mus aguti*" to the true Brazilian species. Moreover, the "*abdomine flavescens*" mentioned in all the descriptions, including Linnæus's, is alone applicable to the latter animal, and might be thought by itself to settle the question, even if the body-colour is rather yellow than "rufescentibus."

* Syst. Nat. (12) p. 80 (1766).

† Hist. Nat. Brasil. p. 224 (1648).

‡ 'Tractatus Topographicus Brasilæ,' p. 5 (1658).

As no other pertinent names have been given, for the red hips and white incisors will readily distinguish the Amazonian *D. croconota*, Wagl., the red-rumped Aguti inhabiting Trinidad and Guiana will need a new name, and may be called

Dasyprocta rubrata, sp. n.

Fur of fore back and sides broadly ringed with black and dark yellow, the general effect being decidedly darker than in *D. aguti*. On the posterior back, as the hairs lengthen, the black rings tend to die out and the yellow gradually becomes more reddish, that of the ends of the long rump-hairs deep chestnut-red; but beneath the surface the bases of these hairs are more orange—in fact, they are orange at their base, reddening outwards to the small subterminal black ring, and with their tips chestnut. Nape and upper surfaces of hands and feet black. Under surface dirty grizzled brownish, not lighter than, and quite continuous with, the colour of the flanks; the interramia, a few hairs on the middle line of the belly, and the inguinal region are inconspicuously yellowish or white.

Skull with the nasals short, evenly rounded behind. Ridge running forward above from the upperside of the infraorbital foramina continuous with the line of the incisors, instead of being nearer the nasals as in *D. aguti*. Bullæ smaller.

Dimensions of the type (a nearly adult female, measured in the flesh by the collector):—

Head and body 499 millim.; tail 28; hind foot, without claws 98, with claws 108; ear 40.

Skull: greatest length 100; basilar length 72.5; greatest breadth 46.5; nasals 36.5 × 17; interorbital breadth 28; palate length from henselion 37.5; diastema 25; length of upper tooth series 17.5.

Hab. (of the type). Savannah Grande, Trinidad.

Type B.M. no. 97. 6. 7. 17. ♀. Collected Feb. 11, 1897, by Dr. Percy Rendall.

Another example from Trinidad, presented by Mr. H. Caracciolo, is in the Museum collection, while three specimens of different ages are labelled as coming from Surinam and Cayenne.

The black nape, black feet, darker body-colour, and darker belly will readily separate this animal from the Brazilian *D. aguti*.

Dasyprocta rubrata flavescens, subsp. n.

Similar to the typical form and equally different from *D. aguti* in the dark tone of the fore back, sides, and under surface, the black nape and black limbs, but with the ends of the rump-hairs orange-yellow instead of red as in the Brazilian species, to which, however, there seems no real relationship.

Hab. Caripé, Cumana, Venezuela.

Type B.M. no. 94. 9. 25. 17. Immature. Collected January 1894 by Mr. A. Mocquerys.

The yellow rump gives this animal a superficial resemblance to *D. aguti*, but it is evidently most nearly allied to *D. rubrata*, from which it is different enough to deserve subspecific separation.

Marmosa regina, sp. n.

Larger than *M. cinerea*, and therefore the largest species of the group as yet described. Fur comparatively short and close, about 11 millim. in length on the back. General colour above buffy grey, finely speckled with brownish. Sides gradually becoming more buffy yellowish, passing into deep yellowish, almost ochraceous, on the under surface. The hairs of the under surface are slaty-based on the sides of the belly, deep yellowish to their bases on the chin, throat, chest, groins, and middle line of belly. On the chest in the type (an old male) there is a skin-gland whose secretion has darkened the neighbouring fur to a reddish brown. Dark orbital marks of medium development; forehead between them light buffy. Ears apparently rather small, their anterior basal projection well marked. Upper surface of hands and feet dull buffy. Tail furry, though not very thickly so, for its basal inch, the remainder practically naked, pale brown throughout, not lightening terminally.

Skull, as compared to that of *M. cinerea*, showing a tendency to the narrowness of brain-case and interorbital region characteristic of *Metachirus*, towards which this species seems to show some approximation. Nasals expanded behind, but less so than in the allied forms. Supraorbital ridges well developed, but not widely expanded; narrowest part of brain-case behind the tips of their postorbital processes. Temporal ridges approaching to within 2.5 millim. on the top of the brain-case. Teeth light and delicate, the molars particularly small in proportion to the size of the animal.

Dimensions of the type (an old male, measured in skin):—

Head and body (probably stretched) 229 millim.; tail 226; hind foot (wet) 29; ear (wet) 23.

Skull: basal length 43·5; greatest breadth 25·4; nasals, length 21·7, least breadth 3·7, greatest breadth 5·4; inter-orbital breadth 8; tip to tip of postorbital processes 9; inter-temporal breadth 6; palate length from heuselion 23·6; palate breadth 13·8; combined length of *ms.*¹⁻³ 6·8.

Hab. W. Cundinamarca (Bogotá region). Coll. G. D. Child, November 1, 1895.

Type B.M. no. 98. 5. 15. 4.

This handsome species may be readily distinguished from *M. cinerea*, its nearest ally, by its dark yellowish belly, uniformly brown tail, and the narrowness of its nasals and interorbital region.

MISCELLANEOUS.

Malacostraca from Puget Sound, N.W. America.

By ALFRED O. WALKER.

ON the occasion of the visit of the British Association to Toronto in 1897 Prof. W. A. Herdman, F.R.S., made a trip to the Pacific coast, and had two or three days' dredging off Port Townsend in Puget Sound and Victoria, B.C. Among other marine animals taken were 33 species of Malacostraca, of which 7 appear to be new to science and 4 are European species, of which I can find no record from the west coast of North America. These last are all Amphipoda, viz. *Leucothoe spinicarpa* (Abild.), *Melita dentata* (Kröyer), *Ischyrocerus minutus*, Lillj., and *Podocerospis excavata* (Sp. Bate).

Trichocarcinus (*Platycarcinus*) *recurvidens* (Sp. Bate, Ann. & Mag. Nat. Hist. ser. 3, vol. xv. p. 488) is redescribed, and the family Trichoceridae, De Haan, abolished, the genus *Trichocarcinus* being placed next to *Cancer*, from which it differs in the greater prominence of the regions of the carapace.

The new species, which, like the last, are fully described and figured in the Trans. Liverpool Biological Society, vol. xii. pp. 268-287, pls. xv. and xvi., are as follows:—

Crangon munitellus.

Near *C. munitus*, Dana, but differing in its much smaller size and in the second thoracic carina from the median terminating in a tooth halfway to the orbital margin, while in *C. munitus* it reaches the margin and has no tooth.